

CLAIMS

What is claimed is:

1. A method of control of collaborative devices, the method comprising the steps of:

5 providing at least two collaborative devices, wherein each collaborative device comprises a client device and an embedded Java server;

providing a registry service to which the collaborative devices are coupled for data communications;

10 providing at least one registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices, wherein the registry records representing capabilities of collaborative devices further comprise data elements describing, for each collaborative device, capabilities, tertiary relationships, and network connectivities;

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providing a service bundle of OSGI-compliant Java servlets comprising at least one predetermined algorithm for controlling the collaborative devices; and

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controlling the collaborative devices in accordance with the predetermined algorithm.

2. The method of claim 1 wherein the predetermined algorithm is dedicated to a particular tertiary relationship, and the predetermined algorithm comprises the further steps of:

5 finding a registry record bearing a set point for the particular tertiary relationship;

reading a sensor value of the particular tertiary relationship;

10 comparing the set point and the sensor value, wherein the comparing produces a comparison result;

15 finding, in dependence upon the comparison result, a registry record having an identified capability appropriate to the comparison result for the particular tertiary relationship;

effecting the capability identified in the found registry record.

3. The method of claim 2 wherein effecting the capability identified in the found registry record includes requesting, by use of an HTTP request, a URL identified in the found registry record as a network connectivity.

4. The method of claim 2 wherein reading a sensor value further comprises the steps of:

finding a registry record for a sensor for the particular tertiary relationship;

effecting the capability identified in the found registry record for the sensor.

5. The method of claim 4 wherein effecting the capability identified in the found registry record for the sensor includes requesting, by use of an HTTP request, a URL identified in the found registry record for the sensor.

6. A system for control of collaborative devices, the system comprising:

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at least two collaborative devices, wherein each collaborative device comprises a client device and an embedded Java server;

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a registry service to which the collaborative devices are coupled for data communications;

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at least one registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices, wherein the registry records representing capabilities of collaborative devices further comprise data elements describing, for each collaborative device, capabilities, tertiary relationships, and network connectivities;

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a service bundle of OSGI-compliant Java servlets comprising at least one predetermined algorithm for controlling the collaborative devices; and

means for controlling the collaborative devices in accordance with the predetermined algorithm.

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The system of claim 6 wherein the predetermined algorithm is dedicated to a particular tertiary relationship, and the means for controlling the collaborative devices in accordance with the predetermined algorithm further comprises:

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means for finding a registry record bearing a set point for the particular tertiary relationship;

means for reading a sensor value of the particular tertiary relationship;

10 means for comparing the set point and the sensor value, wherein the comparing produces a comparison result;

15 means for finding, in dependence upon the comparison result, a registry record having an identified capability appropriate to the comparison result for the particular tertiary relationship;

means for effecting the capability identified in the found registry record.

8. The system of claim 7 wherein means for effecting the capability identified in the found registry record includes means for requesting, by use of an HTTP request, a URL identified as a network connectivity in the found registry record as a network connectivity.

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9. The system of claim 7 wherein means for reading a sensor value further comprises:

5 means for finding a registry record for a sensor for the particular tertiary relationship;

means for effecting the capability identified in the found registry record for the sensor.

10. The method of claim 9 wherein means for effecting the capability identified in the found registry record for the sensor includes means for requesting, by use of an HTTP request, a URL identified as a network connectivity in the found registry record for the sensor.

11. A computer program product for control of collaborative devices, the computer program product implemented in conjunction with at least two collaborative devices, wherein each collaborative device comprises a client device and an embedded Java server, the computer program product comprising:

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a recording medium;

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means, recorded on the recording medium, for providing a registry service to which the collaborative devices are coupled for data communications;

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means, recorded on the recording medium, for providing at least one registry table, wherein the registry table further comprises registry records, wherein the registry records comprise registry records representing capabilities of collaborative devices, wherein the registry records representing capabilities of collaborative devices further comprise data elements describing, for each collaborative device, capabilities, tertiary relationships, and network connectivities;

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means, recorded on the recording medium, for providing a service bundle of OSGI-compliant Java servlets comprising at least one predetermined algorithm for controlling the collaborative devices; and

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means, recorded on the recording medium, for controlling the collaborative devices in accordance with the predetermined algorithm.

12. The computer program product of claim 11 wherein the predetermined algorithm is dedicated to a particular tertiary relationship, and the means for controlling the collaborative devices in accordance with the predetermined algorithm further comprises:

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means, recorded on the recording medium, for finding a registry record bearing a set point for the particular tertiary relationship;

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means, recorded on the recording medium, for reading a sensor value of the particular tertiary relationship;

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means, recorded on the recording medium, for comparing the set point and the sensor value, wherein the comparing produces a comparison result;

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means, recorded on the recording medium, for finding, in dependence upon the comparison result, a registry record having an identified capability appropriate to the comparison result for the particular tertiary relationship;

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means, recorded on the recording medium, for effecting the capability identified in the found registry record.

13. The computer program product of claim 12 wherein means for effecting the capability identified in the found registry record includes means, recorded on the recording medium, for requesting, by use of an HTTP request, a URL identified as a network connectivity in the found registry record as a network connectivity.

14. The computer program product of claim 12 wherein means for reading a sensor value further comprises:

means, recorded on the recording medium, for finding a registry record for a
5 sensor for the particular tertiary relationship;

means, recorded on the recording medium, for effecting the capability identified in the found registry record for the sensor.

15. The computer program product of claim 14 wherein means for effecting the capability identified in the found registry record for the sensor includes means, recorded on the recording medium, for requesting, by use of an HTTP request, a URL identified as a network connectivity in the found registry record for the
5 sensor.